

Notice of Allowability

Application No.

09/732,740

Examiner

Ling-Siu Choi

Applicant(s)

TANASE ET AL.

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1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to the Amendment filed February 18, 2004.
2. ☐ The allowed claim(s) is/are 1-4, 8-11, 23-26, 28, 29, 31, 32 and 34-36.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. This Office Action is in response to the Amendment filed February 18, 2004. Claim 27 was canceled and claims 1-26 and 28-36 are now pending.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Frederick D. Vastine on March 19, 2004.

3. The application has been amended as follows:

Cancel claims 5-7 and 12-22, 30, and 33;

Claim 1, line 3, change "0.06" to --less than 0.06--;

Claim 4, lines 1-3, change "A solid magnesium compound consisting essentially of a magnesium dialkoxide, whose particle size distribution index (P)" to --A solid magnesium compound as claimed in Claim 1, wherein the particle size distribution index (P)--;

Claim 8, line 3, change "0.06" to --less than 0.06--;

Claim 11, lines 1-3, "A solid magnesium compound consisting essentially of a magnesium dialkoxide, whose particle size distribution index (P)" to --A solid magnesium compound as claimed in Claim 8, wherein the particle size distribution index (P)--;

Claim 25, line 4, change "0.06" to --less than 0.06--;

Claim 26, line 4, change "0.06" to --less than 0.06--;

Claim 29, line 3, change "0.06" to --less than 0.06--;

Claim 36, line 1, change "compound prepared" to --compound consisting essentially of a magnesium dialkoxide prepared--;

line 2, change "0.06" to --less than 0.06--.

Allowable Subject Matter

4. Claims 1-4, 8-11, 23-26, 28-29, 31-32, 34-36 are allowed

5. The following is an examiner's statement of reasons for allowance:

The present claims are allowable over the closest references: Murata et al. (US 4,960,743) and Mehta (US 4,820,672).

The present invention relates to a **magnesium compound consisting essentially of a magnesium dialkoxide**, prepared by

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| reacting a magnesium metal, an alcohol, and a halogen and/or a halogen-containing compound | at 30-60°C |
| wherein the gram atoms ratio of halogen atom to magnesium is 0.0001 to less than 0.06 | |

(claim 1)

Murata et al. disclose a magnesium compound obtained by reacting (a) magnesium metal, (b) a **halogenated hydrocarbon of RX**, (c) a compound of $X_n^1M(OR^1)_{m-n}$, and (d) a halogen-containing alcohol (abstract; col. 5, lines 16-18; claim 1). Murata et al. further disclose that the contact temperature for components (a), (b), and (c) falls in the range of 0°-250°C and the contact temperature for the resulting product and component (d) falls in the range of -20°C to 150°C (col. 5, lines 19-24 and 62-64). Attention is drawn to Example 1, wherein the magnesium compound is prepared by the steps of (a) contacting magnesium metal chips with a methyl iodide solution having 10% of iodine, (b) further contacting with n-butyl chloride to form a magnesium-containing solid, and (c) contacting the magnesium-containing solid with 2,2,2-trichloroethanol to form the magnesium compound, which has a particle size distribution (PSDI) of 0.31. The resulting product obtained in Example 1 contains 22.5 wt% and 34.0 wt%, which implies that the molar ratio of chlorine to magnesium is 1.03. Thus, Murata et al. do not disclose or fairly suggest a magnesium compound consisting essentially magnesium dialkoxide [$X/Mg = 0.0001$ - less than 0.06] obtained from a specific process.

Mehta discloses a magnesium compound obtained by (a) contacting 6.0 gm magnesium metal with a few crystals of iodine and 22.85 gm n-BuCl and then (b) contacting the resulting

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product with 2-methyl-1-pentanol at 55°C (Example 2). In view of the Amendment filed August 18, 2003, it was shown that the resulting product obtained in Example 2 contains essentially no base, which imply that the product is not magnesium dialkoxide because of the magnesium dialkoxide is a weak base. Thus, Mehta does not teach or fairly suggest a magnesium compound consisting essentially magnesium dialkoxide [$X/Mg = 0.0001$ - less than 0.06] obtained from the specific process.

In light of the above discussions, it is evident as to why the present claims are patentable over the prior arts.

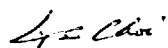
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on 571-272-1114.

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A handwritten signature in cursive script, appearing to read "Ling-Siu Choi".

Ling-Siu Choi

March 19, 2004